

"Made available under NASA sponsorship
in the interest of early and wide dis-
semination of Earth Resources Survey
Program information and without liability
for any use made thereof."

11 July 1973

E7.3 1081.2

CR-133296

(E73-10812) [DEVELOPMENT OF MATHEMATICAL
MODELS FOR PROCESSING S-193 RADAR
ALTIMETER DATA] Monthly Progress Report,
1-3 Jun. 1973 (Research Triangle Inst.)
2 p HC \$3.00

N73-27287

Unclas
00812

G3/13

CSCL 05B

NASA Lyndon B. Johnson Space Center
Earth Observations Division
Attn: Mr. Zack H. Byrns, Mail Code TF6
Houston, Texas 77058

Subject: Contract NAS9-13304 Monthly Progress Report for the Period
of 1 June - 30 June, 1973.

General

Efforts this period have been devoted to the development of mathematical models for processing the S-193 radar altimeter data.

Problem Areas

No administrative problem areas were encountered this period.

Investigation Results

Models for correcting sample and hold bias offset were completed along with the processing for determining IF signal-to-noise ratio. Work continues on sample-and-hold realignment, mean return waveform reconstruction and σ^0 -computation. Temperature dependent system nonlinearities have been encountered which may impact on the derivation of σ^0 from altimeter data, however, more detailed study is required on this problem. Tentative results also indicate inordinately long averaging times for the altitude data in order to stay within the confidence bounds set by the data quantizer.

Next Period Efforts

Efforts will continue toward developing the necessary mathematical models for processing of the altimeter data.

Travel Summary and Plans

No trips were taken this month and none are anticipated for the next period.

Financial Management Report

A financial report for this period is included as Appendix A.

for Gary S. Brown, Co Investigator
Lee S. Miller, Ph.D.
Principal Investigator

LSM/dc